

a) a recombinant nucleic acid molecule comprising a nucleotide sequence encoding hepatitis C virus NS4 or NS5 protein, wherein said nucleotide sequence is operably linked to regulatory elements functional in human cells; and

b) a pharmaceutically acceptable carrier or diluent;

wherein said regulatory elements functional in human cells comprise a promoter, enhancer, polyadenylation sequence, and 5' UTR of hepatitis C virus.

32. (Amended three times) A method of treating a human who is infected with hepatitis C virus comprising administering to said human a pharmaceutical composition in an amount effective to induce a therapeutic immune response against hepatitis C virus, wherein said composition comprises a recombinant nucleic acid molecule comprising a nucleotide sequence encoding a hepatitis C virus nonstructural protein, wherein said nucleotide sequence is operably linked to regulatory elements functional in human cells, and a pharmaceutically acceptable carrier or diluent, wherein said regulatory elements functional in human cells comprise a promoter, enhancer, polyadenylation sequence, and 5' UTR of hepatitis C virus.

45. (Amended) A pharmaceutical composition comprising:

a) a recombinant nucleic acid molecule comprising a nucleotide sequence encoding a hepatitis C virus nonstructural protein, wherein said nucleotide sequence is operably linked to regulatory elements functional in human cells;

b) a pharmaceutically acceptable carrier or diluent; and

c) a facilitator;

wherein said regulatory elements functional in human cells comprise a promoter, enhancer, polyadenylation sequence, and 5' UTR of hepatitis C virus.